



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,313	05/31/2001	Donald V. Perino	RA066R	1848

27846 7590 01/08/2003

RAMBUS INC.
4440 EL CAMINO REAL
LOS ALTOS, CA 94022

EXAMINER

ABRAMS, NEIL

ART UNIT	PAPER NUMBER
----------	--------------

2839

DATE MAILED: 01/08/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871313

Applicant(s)

Examiner

Abrams

Group Art Unit

2839

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 9-14-02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-62 is/are pending in the application.
- ☐ Of the above claim(s) is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☒ Claim(s) 1-62 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2839

The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claims 18-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18, lines 14-17 reference to the signal line contact elements coupled to a ground plane is unclear and inconsistent with the original disclosure. In figs. 3A, 3B separate signal liner and ground plates 2, 22 are shown. Only the ground plates are joined to a ground plane 35. Nothing in the disclosure is seen to provide basis for reference to the fig. 3B ground plates (lines) as signal lines.

Claims 1-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabbe in view of Uberbacher, Goodman, Ritchie, Canning, Inacker, Thompson and Goshorn.

Grabbe at 68 shows slots 68 for bus bars ^{3,4}(fig. 1). Obvious these busses could be for signal and ground as per Ritchie, see abstract, Uberbacher and Goshorn and to interleave them as taught by Uberbacher. In Goshorn, see col. 5, lines 35-40.

It appears from Grabbe disclosure that such signal bus bars and ground bus bars would connect to circuit lines on the pcb, like that at 84. Goshorn, figs. 2, 7, shows how such connections could be formed for ground and signal, Traces like 84 of Grabbe, 52 of Goshorn would form a ground reference. While not required by these claims also obvious to use a ground plane like 84 of Goodman. For dependent claims obvious to add resistors as per canning and

Art Unit: 2839


elastomer backup as in Thompson. Inacker added to further show how such busses could include plate-like structure.

In summary, the Grabbe ground busses seem adequate for claims 1, etc. Obvious to interleave ground busses with signal busses and to join the signal busses to traces on the circuit board just as the Goshorn signal busses 80 are joined at 120 to the circuit board. With connections along the bus bar as in Goshorn, connections at the bus bar ends would be present.

Nothing in the claims requires "only two" connections one at each busbar end. Argument and spec discussion are seen to assert patentability based on signal bus bars having connections "only at their ends". However the claims are not so limited and are readable on bus bar signal connections as in Goshorn, fig. 7. Applicant is asked if use of "Grabbe system with interleaved ground and signal bus bars all joined to the circuit board" is at issue apart from other features. Is such assembly known in the prior art? Applicant asked to provide sketch showing the closest prior art system using signal and ground buses, see col 1, Rambus Channel discussion, Any inquiry concerning this communication should be directed to N. Abrams at telephone number (703)308-1729.

Abrams/ek

12/27/02


N. ABRAMS
EXAMINER
ART UNIT 322